

small. According to the most recent *Trends in Telephone Service* data, 719 carriers reported that they were engaged in the provision of cellular service, Personal Communications Service, or Specialized Mobile Radio Telephony services, which are placed together in the data.⁵³ We have estimated that 294 of these are small, under the SBA small business size standard.⁵⁴

19. *Common Carrier Paging.* The SBA has developed a small business size standard for wireless firms within the broad economic census categories of "Cellular and Other Wireless Telecommunications."⁵⁵ Under this SBA category, a wireless business is small if it has 1,500 or fewer employees. For the census category of Paging, Census Bureau data for 1997 show that there were 1,320 firms in this category, total, that operated for the entire year.⁵⁶ Of this total, 1,303 firms had employment of 999 or fewer employees, and an additional 17 firms had employment of 1,000 employees or more.⁵⁷ Thus, under this category and associated small business size standard, the great majority of firms can be considered small. In the Paging *Third Report and Order*, we developed a small business size standard for "small businesses" and "very small businesses" for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.⁵⁸ A "small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$15 million for the preceding three years. Additionally, a "very small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$3 million for the preceding three years.⁵⁹ The SBA has approved these small business size standards.⁶⁰ An auction of Metropolitan Economic Area licenses commenced on February 24, 2000, and closed on March 2, 2000.⁶¹ Of the 985 licenses auctioned, 440 were sold. Fifty-seven companies claiming small business status won. According to the most recent *Trends in Telephone Service*, 433 carriers reported that they were engaged in the provision of paging and messaging services.⁶² Of those, we estimate that 423 are small, under the

⁵³FCC, Wireline Competition Bureau, Industry Analysis and Technology Division, "Trends in Telephone Service" at Table 5.3, page 5-5 (August 2003).

⁵⁴*Id.*

⁵⁵13 C.F.R. § 121.201, NAICS code 513322.

⁵⁶U.S. Census Bureau, 1997 Economic Census, Subject Series: "Information," Table 5, Employment Size of Firms Subject to Federal Income Tax: 1997, NAICS code 513321 (issued October 2000).

⁵⁷*Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is "Firms with 1000 employees or more."

⁵⁸*Amendment of Part 90 of the Commission's Rules to Provide for the Use of the 220-222 MHz Band by the Private Land Mobile Radio Service*, PR Docket No. 89-552, Third Report and Order and Fifth Notice of Proposed Rulemaking, 12 FCC Rcd 10943, 11068-70, paras. 291-295 (1997).

⁵⁹See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from A. Alvarez, Administrator, SBA (Dec. 2, 1998).

⁶⁰*Revision of Part 22 and Part 90 of the Commission's Rules to Facilitate Future Development of Paging Systems*, Memorandum Opinion and Order on Reconsideration and Third Report and Order, 14 FCC Rcd 10030, paras. 98-107 (1999).

⁶¹*Id.* at 10085, para. 98.

⁶²"Trends in Telephone Service" at Table 5.3.

SBA approved small business size standard.⁶³

20. *Wireless Communications Services.* This service can be used for fixed, mobile, radiolocation, and digital audio broadcasting satellite uses. The Commission established small business size standards for the wireless communications services auction. A "small business" is an entity with average gross revenues of \$40 million for each of the three preceding years, and a "very small business" is an entity with average gross revenues of \$15 million for each of the three preceding years. The SBA has approved these small business size standards.⁶⁴ The Commission auctioned geographic area licenses in the wireless communications services. In the auction, there were seven winning bidders that qualified as "very small business" entities, and one that qualified as a "small business" entity.

21. *Wireless Telephony.* Wireless telephony includes cellular, personal communications services, and specialized mobile radio telephony carriers. As noted earlier, the SBA has developed a small business size standard for "Cellular and Other Wireless Telecommunications" services.⁶⁵ Under that SBA small business size standard, a business is small if it has 1,500 or fewer employees.⁶⁶ According to the most recent *Trends in Telephone Service* data, 719 carriers reported that they were engaged in the provision of wireless telephony.⁶⁷ We have estimated that 294 of these are small under the SBA small business size standard.

22. *Broadband Personal Communications Service.* The broadband Personal Communications Service (PCS) spectrum is divided into six frequency blocks designated A through F, and the Commission has held auctions for each block. The Commission defined "small entity" for Blocks C and F as an entity that has average gross revenues of \$40 million or less in the three previous calendar years.⁶⁸ For Block F, an additional classification for "very small business" was added and is defined as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.⁶⁹ These standards defining "small entity" in the context of broadband PCS auctions have been approved by the SBA.⁷⁰ No small businesses, within the SBA-approved small business size standards bid successfully for licenses in Blocks A and B. There were 90 winning bidders that qualified as small entities in the Block C auctions. A total of 93 small and very small business bidders won

⁶³*Id.*

⁶⁴See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from A. Alvarez, Administrator, Small Business Administration (December 2, 1998).

⁶⁵13 C.F.R. § 121.201, NAICS code 513322.

⁶⁶*Id.*

⁶⁷"Trends in Telephone Service" at Table 5.3.

⁶⁸See *Amendment of Parts 20 and 24 of the Commission's Rules – Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap*, WT Docket No. 96-59, Report and Order, 11 FCC Rcd 7824 (1996); see also 47 C.F.R. § 24.720(b).

⁶⁹See *Amendment of Parts 20 and 24 of the Commission's Rules – Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap*, WT Docket No. 96-59, Report and Order, 11 FCC Rcd 7824 (1996).

⁷⁰See, e.g., *Implementation of Section 309(j) of the Communications Act – Competitive Bidding*, PP Docket No. 93-253, Fifth Report and Order, 9 FCC Rcd 5332 (1994).

approximately 40 percent of the 1,479 licenses for Blocks D, E, and F.⁷¹ On March 23, 1999, the Commission re-auctioned 347 C, D, E, and F Block licenses. There were 48 small business winning bidders. On January 26, 2001, the Commission completed the auction of 422 C and F Broadband PCS licenses in Auction No. 35. Of the 35 winning bidders in this auction, 29 qualified as "small" or "very small" businesses. Subsequent events, concerning Auction 35, including judicial and agency determinations, resulted in a total of 163 C and F Block licenses being available for grant. In addition, we note that, as a general matter, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. Also, the Commission does not generally track subsequent business size unless, in the context of assignments or transfers, unjust enrichment issues are implicated.

23. *Narrowband Personal Communications Services.* To date, two auctions of narrowband PCS licenses have been conducted. For purposes of the two auctions that have already been held, "small businesses" were entities with average gross revenues for the prior three calendar years of \$40 million or less. Through these auctions, the Commission has awarded a total of 41 licenses, out of which 11 were obtained by small businesses. To ensure meaningful participation of small business entities in future auctions, the Commission has adopted a two-tiered small business size standard in the *Narrowband PCS Second Report and Order*.⁷² A "small business" is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than \$40 million. A "very small business" is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than \$15 million. The SBA has approved these small business size standards.⁷³ In the future, the Commission will auction 459 licenses to serve Metropolitan Trading Areas and 408 response channel licenses. There is also one megahertz of narrowband PCS spectrum that has been held in reserve and that the Commission has not yet decided to release for licensing. The Commission cannot predict accurately the number of licenses that will be awarded to small entities in future actions. However, four of the 16 winning bidders in the two previous narrowband PCS auctions were small businesses, as that term was defined. The Commission assumes, for purposes of this analysis, that a large portion of the remaining narrowband PCS licenses will be awarded to small entities. The Commission also assumes that at least some small businesses will acquire narrowband PCS licenses by means of the Commission's partitioning and disaggregation rules.

24. *220 MHz Radio Service – Phase I Licensees.* The 220 MHz service has both Phase I and Phase II licenses. Phase I licensing was conducted by lotteries in 1992 and 1993. There are approximately 1,515 such non-nationwide licensees and four nationwide licensees currently authorized to operate in the 220 MHz band. The Commission has not developed a small business size standard for small entities specifically applicable to such incumbent 220 MHz Phase I licensees. To estimate the number of such licensees that are small businesses, we apply the small business size standard under the SBA rules applicable to "Cellular and Other Wireless Telecommunications" companies. This category

⁷¹FCC News, Broadband PCS, D, E and F Block Auction Closes, No. 71744 (released January 14, 1997). *See also Amendment of the Commission's Rules Regarding Installment Payment Financing for Personal Communications Services (PCS) Licenses*, WT Docket No. 97-82, Second Report and Order, 12 FCC Rcd 16436 (1997).

⁷²*Amendment of the Commission's Rules to Establish New Personal Communications Services, Narrowband PCS*, Docket No. ET 92-100, Docket No. PP 93-253, Second Report and Order and Second Further Notice of Proposed Rulemaking, 15 FCC Rcd 10456 (2000).

⁷³*See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from A. Alvarez, Administrator, Small Business Administration (December 2, 1998).*

provides that a small business is a wireless company employing no more than 1,500 persons.⁷⁴ According to the Census Bureau data for 1997, only 12 wireless firms out of a total of 1,238 such firms that operated for the entire year, had 1,000 or more employees.⁷⁵ If this general ratio continues in the context of Phase I 220 MHz licensees, the Commission estimates that nearly all such licensees are small businesses under the SBA's small business size standard.

25. *220 MHz Radio Service – Phase II Licensees.* The 220 MHz service has both Phase I and Phase II licenses. The Phase II 220 MHz service is a new service, and is subject to spectrum auctions. In the *220 MHz Third Report and Order*, we adopted a small business size standard for “small” and “very small” businesses for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.⁷⁶ This small business size standard indicates that a “small business” is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$15 million for the preceding three years.⁷⁷ A “very small business” is an entity that, together with its affiliates and controlling principals, has average gross revenues that do not exceed \$3 million for the preceding three years. The SBA has approved these small business size standards.⁷⁸ Auctions of Phase II licenses commenced on September 15, 1998, and closed on October 22, 1998.⁷⁹ In the first auction, 908 licenses were auctioned in three different-sized geographic areas: three nationwide licenses, 30 Regional Economic Area Group Licenses, and 875 Economic Area Licenses. Of the 908 licenses auctioned, 693 were sold.⁸⁰ Thirty-nine small businesses won licenses in the first 220 MHz auction. The second auction included 225 licenses: 216 EA licenses and 9 EAG licenses. Fourteen companies claiming small business status won 158 licenses.⁸¹

26. *800 MHz and 900 MHz Specialized Mobile Radio Licenses.* The Commission awards “small entity” and “very small entity” bidding credits in auctions for Specialized Mobile Radio (SMR) geographic area licenses in the 800 MHz and 900 MHz bands to firms that had revenues of no more than \$15 million in each of the three previous calendar years, or that had revenues of no more than \$3 million in each of the previous calendar years, respectively.⁸² These bidding credits apply to SMR providers in the 800 MHz and 900 MHz bands that either hold geographic area licenses or have obtained extended implementation authorizations. The Commission does not know how many firms provide 800 MHz or 900 MHz geographic area SMR service pursuant to extended implementation authorizations, nor how many of these providers have annual revenues of no more than \$15 million. One firm has over \$15

⁷⁴13 CFR § 121.201, NAICS code 513322.

⁷⁵U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization), Table 5, NAICS code 513322 (issued October 2000).”

⁷⁶*220 MHz Third Report and Order*, 12 FCC Rcd 10943, 11068-70, paras. 291-295 (1997).

⁷⁷*Id.* at 11068-70, para. 291.

⁷⁸See letter to D. Phythyon, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from A. Alvarez, Administrator, Small Business Administration (January 6, 1998).

⁷⁹See generally Public Notice, “220 MHz Service Auction Closes,” Public Notice, 14 FCC Rcd 605 (1998).

⁸⁰See, e.g., Public Notice, “FCC Announces It is Prepared to Grant 654 Phase II 220 MHz Licenses After Final Payment is Made,” 14 FCC Rcd 1085 (1999).

⁸¹Public Notice, “Phase II 220 MHz Service Spectrum Auction Closes,” 14 FCC Rcd 11218 (1999).

⁸²47 CFR § 90.814(b)(1).

million in revenues. The Commission assumes, for purposes here, that all of the remaining existing extended implementation authorizations are held by small entities, as that term is defined by the SBA. The Commission has held auctions for geographic area licenses in the 800 MHz and 900 MHz SMR bands. There were 60 winning bidders that qualified as small or very small entities in the 900 MHz SMR auctions. Of the 1,020 licenses won in the 900 MHz auction, bidders qualifying as small or very small entities won 263 licenses. In the 800 MHz auction, 38 of the 524 licenses won were won by small and very small entities. Consequently, the Commission estimates that there are 301 or fewer small entity SMR licensees in the 800 MHz and 900 MHz bands that may be affected by the rules and policies adopted herein.

27. *700 MHz Guard Band Licensees.* In the 700 MHz Guard Band Order, we adopted a small business size standard for "small businesses" and "very small businesses" for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.⁸³ A "small business" as an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$15 million for the preceding three years. Additionally, a "very small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$3 million for the preceding three years. An auction of 52 Major Economic Area licenses commenced on September 6, 2000, and closed on September 21, 2000.⁸⁴ Of the 104 licenses auctioned, 96 licenses were sold to nine bidders. Five of these bidders were small businesses that won a total of 26 licenses. A second auction of 700 MHz Guard Band licenses commenced on February 13, 2001 and closed on February 21, 2001. All eight of the licenses auctioned were sold to three bidders. One of these bidders was a small business that won a total of two licenses.⁸⁵

28. *Rural Radiotelephone Service.* The Commission has not adopted a size standard for small businesses specific to the Rural Radiotelephone Service.⁸⁶ A significant subset of the Rural Radiotelephone Service is the Basic Exchange Telephone Radio System.⁸⁷ The Commission uses the SBA's small business size standard applicable to "Cellular and Other Wireless Telecommunications," i.e., an entity employing no more than 1,500 persons.⁸⁸ There are approximately 1,000 licensees in the Rural Radiotelephone Service, and the Commission estimates that there are 1,000 or fewer small entity licensees in the Rural Radiotelephone Service that may be affected by the rules and policies adopted herein.

29. *Air-Ground Radiotelephone Service.* The Commission has not adopted a small business size standard specific to the Air-Ground Radiotelephone Service.⁸⁹ We will use SBA's small business size standard applicable to "Cellular and Other Wireless Telecommunications," i.e., an entity employing no

⁸³ See *Service Rules for the 746-764 MHz Bands, and Revisions to Part 27 of the Commission's Rules*, WT Docket No. 99-168, Second Report and Order, 65 FR 17599 (2000).

⁸⁴ See generally Public Notice, "220 MHz Service Auction Closes," Report No. WT 98-36 (Wireless Telecommunications Bureau, Oct. 23, 1998).

⁸⁵ Public Notice, "700 MHz Guard Band Auction Closes," DA 01-478 (released Feb. 22, 2001).

⁸⁶ The service is defined in § 22.99 of the Commission's Rules, 47 C.F.R. § 22.99.

⁸⁷ BETRS is defined in §§ 22.757 and 22.759 of the Commission's Rules, 47 C.F.R. §§ 22.757 and 22.759.

⁸⁸ 13 C.F.R. § 121.201, NAICS code 513322.

⁸⁹ The service is defined in § 22.99 of the Commission's Rules, 47 C.F.R. § 22.99.

more than 1,500 persons.⁹⁰ There are approximately 100 licensees in the Air-Ground Radiotelephone Service, and we estimate that almost all of them qualify as small under the SBA small business size standard.

30. *Fixed Microwave Services.* Fixed microwave services include common carrier,⁹¹ private operational-fixed,⁹² and broadcast auxiliary radio services.⁹³ At present, there are approximately 22,015 common carrier fixed licensees and 61,670 private operational-fixed licensees and broadcast auxiliary radio licensees in the microwave services. The Commission has not created a size standard for a small business specifically with respect to fixed microwave services. For purposes of this analysis, the Commission uses the SBA small business size standard for the category "Cellular and Other Telecommunications," which is 1,500 or fewer employees.⁹⁴ The Commission does not have data specifying the number of these licensees that have more than 1,500 employees, and thus are unable at this time to estimate with greater precision the number of fixed microwave service licensees that would qualify as small business concerns under the SBA's small business size standard. Consequently, the Commission estimates that there are up to 22,015 common carrier fixed licensees and up to 61,670 private operational-fixed licensees and broadcast auxiliary radio licensees in the microwave services that may be small and may be affected by the rules and policies adopted herein. We noted, however, that the common carrier microwave fixed licensee category includes some large entities.

31. *Offshore Radiotelephone Service.* This service operates on several UHF television broadcast channels that are not used for television broadcasting in the coastal areas of states bordering the Gulf of Mexico.⁹⁵ There are presently approximately 55 licensees in this service. We are unable to estimate at this time the number of licensees that would qualify as small under the SBA's small business size standard for "Cellular and Other Wireless Telecommunications" services.⁹⁶ Under that SBA small business size standard, a business is small if it has 1,500 or fewer employees.⁹⁷

32. *39 GHz Service.* The Commission created a special small business size standard for 39 GHz licenses – an entity that has average gross revenues of \$40 million or less in the three previous calendar

⁹⁰ 13 CFR § 121.201, NAICS codes 513322.

⁹¹ See 47 C.F.R. §§ 101 *et seq.* (formerly, Part 21 of the Commission's Rules) for common carrier fixed microwave services (except Multipoint Distribution Service).

⁹² Persons eligible under parts 80 and 90 of the Commission's Rules can use Private Operational-Fixed Microwave services. See 47 C.F.R. Parts 80 and 90. Stations in this service are called operational-fixed to distinguish them from common carrier and public fixed stations. Only the licensee may use the operational-fixed station, and only for communications related to the licensee's commercial, industrial, or safety operations.

⁹³ Auxiliary Microwave Service is governed by Part 74 of Title 47 of the Commission's Rules. See 47 C.F.R. Part 74. This service is available to licensees of broadcast stations and to broadcast and cable network entities. Broadcast auxiliary microwave stations are used for relaying broadcast television signals from the studio to the transmitter, or between two points such as a main studio and an auxiliary studio. The service also includes mobile television pickups, which relay signals from a remote location back to the studio.

⁹⁴ 13 CFR § 121.201, NAICS code 513322.

⁹⁵ This service is governed by Subpart I of Part 22 of the Commission's Rules. See 47 C.F.R. §§ 22.1001-22.1037.

⁹⁶ 13 C.F.R. § 121.201, NAICS code 513322.

⁹⁷ *Id.*

years.⁹⁸ An additional size standard for “very small business” is: an entity that, together with affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.⁹⁹ The SBA has approved these small business size standards.¹⁰⁰ The auction of the 2,173 39 GHz licenses began on April 12, 2000 and closed on May 8, 2000. The 18 bidders who claimed small business status won 849 licenses. Consequently, the Commission estimates that 18 or fewer 39 GHz licensees are small entities that may be affected by the rules and policies adopted herein.

33. *Multipoint Distribution Service, Multichannel Multipoint Distribution Service, and ITFS.* Multichannel Multipoint Distribution Service systems, often referred to as “wireless cable,” transmit video programming to subscribers using the microwave frequencies of the Multipoint Distribution Service (MDS) and Instructional Television Fixed Service (ITFS).¹⁰¹ In connection with the 1996 MDS auction, the Commission established a small business size standard as an entity that had annual average gross revenues of less than \$40 million in the previous three calendar years.¹⁰² The MDS auctions resulted in 67 successful bidders obtaining licensing opportunities for 493 Basic Trading Areas. Of the 67 auction winners, 61 met the definition of a small business. MDS also includes licensees of stations authorized prior to the auction. In addition, the SBA has developed a small business size standard for Cable and Other Program Distribution, which includes all such companies generating \$12.5 million or less in annual receipts.¹⁰³ According to Census Bureau data for 1997, there were a total of 1,311 firms in this category, total, that had operated for the entire year.¹⁰⁴ Of this total, 1,180 firms had annual receipts of under \$10 million and an additional 52 firms had receipts of \$10 million or more but less than \$25 million. Consequently, we estimate that the majority of providers in this service category are small businesses that may be affected by the rules and policies adopted herein. This SBA small business size standard also appears applicable to ITFS. There are presently 2,032 ITFS licensees. All but 100 of these licenses are held by educational institutions. Educational institutions are included in this analysis as small entities.¹⁰⁵ Thus, we tentatively conclude that at least 1,932 licensees are small businesses.

34. *Local Multipoint Distribution Service.* Local Multipoint Distribution Service (LMDS) is a

⁹⁸ See *Amendment of the Commission's Rules Regarding the 37.0-38.6 GHz and 38.6-40.0 GHz Bands*, ET Docket No. 95-183, Report and Order, 63 Fed.Reg. 6079 (Feb. 6, 1998).

⁹⁹ *Id.*

¹⁰⁰ See Letter to Kathleen O'Brien Ham, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC, from Aida Alvarez, Administrator, SBA (Feb. 4, 1998).

¹⁰¹ *Amendment of Parts 21 and 74 of the Commission's Rules with Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service and Implementation of Section 309(j) of the Communications Act – Competitive Bidding*, MM Docket No. 94-131 and PP Docket No. 93-253, Report and Order, 10 FCC Rcd 9589, 9593, para. 7 (1995).

¹⁰² 47 C.F.R. § 21.961(b)(1).

¹⁰³ 13 C.F.R. § 121.201, NAICS code 513220.

¹⁰⁴ U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization)”, Table 4, NAICS code 513220 (issued October 2000).

¹⁰⁵ In addition, the term “small entity” within SBREFA applies to small organizations (nonprofits) and to small governmental jurisdictions (cities, counties, towns, townships, villages, school districts, and special districts with populations of less than 50,000). 5 U.S.C. §§ 601(4)-(6). We do not collect annual revenue data on ITFS licensees.

fixed broadband point-to-multipoint microwave service that provides for two-way video telecommunications.¹⁰⁶ The auction of the 1,030 LMDS licenses began on February 18, 1998 and closed on March 25, 1998. The Commission established a small business size standard for LMDS licenses as an entity that has average gross revenues of less than \$40 million in the three previous calendar years.¹⁰⁷ An additional small business size standard for "very small business" was added as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.¹⁰⁸ The SBA has approved these small business size standards in the context of LMDS auctions.¹⁰⁹ There were 93 winning bidders that qualified as small entities in the LMDS auctions. A total of 93 small and very small business bidders won approximately 277 A Block licenses and 387 B Block licenses. On March 27, 1999, the Commission re-auctioned 161 licenses; there were 40 winning bidders. Based on this information, we conclude that the number of small LMDS licenses consists of the 93 winning bidders in the first auction and the 40 winning bidders in the re-auction, for a total of 133 small entity LMDS providers.

35. *218-219 MHz Service.* The first auction of 218-219 MHz spectrum resulted in 170 entities winning licenses for 594 Metropolitan Statistical Area licenses. Of the 594 licenses, 557 were won by entities qualifying as a small business. For that auction, the small business size standard was an entity that, together with its affiliates, has no more than a \$6 million net worth and, after federal income taxes (excluding any carry over losses), has no more than \$2 million in annual profits each year for the previous two years.¹¹⁰ In the *218-219 MHz Report and Order and Memorandum Opinion and Order*, we established a small business size standard for a "small business" as an entity that, together with its affiliates and persons or entities that hold interests in such an entity and their affiliates, has average annual gross revenues not to exceed \$15 million for the preceding three years.¹¹¹ A "very small business" is defined as an entity that, together with its affiliates and persons or entities that hold interests in such an entity and its affiliates, has average annual gross revenues not to exceed \$3 million for the preceding three years.¹¹² We cannot estimate, however, the number of licenses that will be won by entities qualifying as small or very small businesses under our rules in future auctions of 218-219 MHz spectrum.

36. *24 GHz – Incumbent Licensees.* This analysis may affect incumbent licensees who were relocated to the 24 GHz band from the 18 GHz band, and applicants who wish to provide services in the 24 GHz band. The applicable SBA small business size standard is that of "Cellular and Other Wireless Telecommunications" companies. This category provides that such a company is small if it employs no

¹⁰⁶See *Local Multipoint Distribution Service*, Second Report and Order, 12 FCC Rcd 12545 (1997).

¹⁰⁷*Id.*

¹⁰⁸*Id.*

¹⁰⁹See Letter to Dan Phythyon, Chief, Wireless Telecommunications Bureau, FCC, from Aida Alvarez, Administrator, SBA (Jan. 6, 1998).

¹¹⁰*Implementation of Section 309(j) of the Communications Act – Competitive Bidding*, PP Docket No. 93-253, Fourth Report and Order, 59 Fed.Reg. 24947 (May 13, 1994).

¹¹¹*In the Matter of Amendment of Part 95 of the Commission's Rules to Provide Regulatory Flexibility in the 218-219 MHz Service*, WT Docket No. 98-169, Report and Order and Memorandum Opinion and Order, 64 Fed.Reg. 59656 (Nov. 3, 1999).

¹¹²*Id.*

more than 1,500 persons.¹¹³ According to Census Bureau data for 1997, there were 977 firms in this category, total, that operated for the entire year.¹¹⁴ Of this total, 965 firms had employment of 999 or fewer employees, and an additional 12 firms had employment of 1,000 employees or more.¹¹⁵ Thus, under this size standard, the great majority of firms can be considered small. These broader census data notwithstanding, we believe that there are only two licensees in the 24 GHz band that were relocated from the 18 GHz band, Teligent¹¹⁶ and TRW, Inc. It is our understanding that Teligent and its related companies have less than 1,500 employees, though this may change in the future. TRW is not a small entity. Thus, only one incumbent licensee in the 24 GHz band is a small business entity.

37. *24 GHz – Future Licensees.* With respect to new applicants in the 24 GHz band, the small business size standard for “small business” is an entity that, together with controlling interests and affiliates, has average annual gross revenues for the three preceding years not in excess of \$15 million.¹¹⁷ “Very small business” in the 24 GHz band is an entity that, together with controlling interests and affiliates, has average gross revenues not exceeding \$3 million for the preceding three years.¹¹⁸ The SBA has approved these small business size standards.¹¹⁹ These size standards will apply to the future auction, if held.

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements

38. In the IRFA, we invited comment on any possible costs associated with the abbreviated dialing arrangement ultimately chosen to comply with the Pipeline Safety Act.¹²⁰ We received five general, non-IRFA comments in response to this issue. Commenters support the NANC’s recommendation that the cost of implementing a One Call service should not be an unfunded mandate.¹²¹ Qwest asserts that, although past N11 deployments have not typically involved federal cost recovery, state

¹¹³ 13 C.F.R. § 121.201, NAICS code 513322.

¹¹⁴ U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, “Employment Size of Firms Subject to Federal Income Tax: 1997,” Table 5, NAICS code 513322 (issued Oct. 2000).

¹¹⁵ *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is “Firms with 1,000 employees or more.”

¹¹⁶ Teligent acquired the DEMS licenses of FirstMark, the only licensee other than TRW in the 24 GHz band whose license has been modified to require relocation to the 24 GHz band.

¹¹⁷ *In the Matter of Amendments to Parts 1, 2, 87 and 101 of the Commission’s Rules to License Fixed Services at 24 GHz*, Report and Order, 15 FCC Rcd 16934, 16967 (2000); see also 47 C.F.R. § 101.538(a)(2).

¹¹⁸ *In the Matter of Amendments to Parts 1, 2, 87 and 101 of the Commission’s Rules to License Fixed Services at 24 GHz*, Report and Order, 15 FCC Rcd 16934, 16967 (2000); see also 47 C.F.R. § 101.538(a)(1).

¹¹⁹ See Letter to Margaret W. Wiener, Deputy Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC, from Gary M. Jackson, Assistant Administrator, SBA (July 28, 2000).

¹²⁰ See Notice, 19 FCC Rcd at 9202, para. 35.

¹²¹ See DIG IMG Report at 11; APCC Comments at 3-4; NTCA Comments at 1-3; Qwest Comments at 10-11; SBC Comments at 6; Verizon Reply at 2; Verizon *Ex Parte*. For example, SBC estimates that the implementation of the 811 code will cost SBC approximately \$1.5 million dollars for switch translations, network testing, and other network-related costs. The information technology work required will cost approximately \$750,000 to \$1 million dollars, and customer education will cost approximately \$500,000 to \$750,000. SBC Comments at 6.

regulatory commissions are not uniform in the way in which they resolve cost recovery matters associated with N11 deployments.¹²² Specifically, APCC contends that if payphone service providers are not excluded from the statutory mandate, then they should also be compensated for such calls.¹²³

39. While we recognize that there may be some costs associated with implementation of the 811 code, we have not specified parameters for cost recovery in this *Order*. The Pipeline Safety Act did not provide for federal financial support as part of the mandate for a nationwide abbreviated dialing arrangement for access to One Call Centers.¹²⁴ Therefore, we find that the Congressional mandate and benefits of a national N11 code assignment, specifically 811, outweigh any concerns regarding cost recovery on the federal level. These issues are most appropriately addressed by the state and local governments. As indicated above, we believe that state commissions are in the best position to address issues associated with implementing 811 because many of the One Call Centers were developed by, or under the auspices of, the state commissions.¹²⁵

E. Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered

40. The RFA requires an agency to describe any significant, specifically small business, alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.¹²⁶

41. In adopting 811 as the national abbreviated dialing code for access to One Call Centers, we have taken steps to minimize the impact on small entities. The overall objective of this proceeding was to assess possible abbreviated dialing arrangements to use to access state One Call Centers as mandated by the Pipeline Safety Act, while at the same time, seeking to minimize any adverse impact on numbering resources.¹²⁷ We, therefore, sought comment on various abbreviated dialing arrangements, including those considered and recommended by the NANC, that could be used by state One Call notification systems in compliance with the Pipeline Safety Act while at the same time minimizing, to the extent

¹²²See Qwest Comments at 10-11.

¹²³See APCC Comments at 3-4.

¹²⁴See Pipeline Safety Act § 17. We agree with APCC that Section 276 of the 1996 Act does not exempt payphone calls made to One Call Centers from that statute's requirement that payphone service providers be "fairly compensated." See 47 U.S.C. § 276(b)(1). Therefore, coin calls made from a payphone to a One Call Center should be paid in accordance with that payphone's established coin rate, and coinless calls made from a payphone to a One Call Center should be compensated in accordance with the Commission's payphone compensation rules. See 47 C.F.R. §§ 64.1300 *et seq.*

¹²⁵See *Order*, *supra* para. 35.

¹²⁶5 U.S.C. § 603(c).

¹²⁷See *Order*, *supra* para. 9.

possible, any adverse impact on numbering resources, including any impact on small entities.¹²⁸

42. After reviewing the comments and considering the possible abbreviated dialing arrangements that could be used by state One Call notification systems in compliance with the Pipeline Safety Act, we conclude that an N11 code is the best solution, within the framework of the statute, for access to One Call Centers.¹²⁹ Thus, consistent with the statutory mandate, we designate 811 as the national abbreviated dialing code to be used by state One Call notification systems for providing advanced notice of excavation activities to underground facility operators in compliance with the Pipeline Safety Act.¹³⁰ We agree with commenters that the other proposed alternatives - codes using a leading star or number sign, e.g. *344 or #344, and the establishment of an ERC, such as 344, as an abbreviated dialing code are impractical, costly to implement, and could delay the availability of a national One Call number for years.¹³¹ Moreover, this abbreviated dialing arrangement would not achieve the uniformity mandated by the Pipeline Safety Act since all users would not be dialing the same sequence if the code selected includes a star or number sign.¹³² We believe that 811 will have less impact on customer dialing patterns and can be implemented without the substantial cost and delay of switch development required with other proposed alternatives.¹³³

43. Although we recognize that using 811 depletes the quantity of remaining N11 codes assignable for other purposes, using an N11 code to access One Call Centers will consume fewer numbering resources than certain other alternative abbreviated dialing arrangements.¹³⁴ Additionally, the use of an N11 code to access One Call services follows the existing conventions for abbreviated dialing already familiar to customers.¹³⁵ The N11 architecture is an established abbreviated dialing plan that is recognized by switch manufacturers and the public at large.¹³⁶ Most significantly, using an N11 code such as 811 satisfies the legislative mandate for a three-digit nationwide number.¹³⁷

44. Further, although the Commission has allowed the local use of unassigned N11 codes, it has recognized that this use must be discontinued on short notice.¹³⁸ Accordingly, in this *Order*, we reject THG's proposed alternative that would have allowed the continued use of 811 for commercial purposes until a qualified entity applies for and develops the capability to put the code into use for One Call

¹²⁸ *Id.*

¹²⁹ See *Order*, *supra* para. 12.

¹³⁰ *Id.*

¹³¹ *Id.*

¹³² *Id.*

¹³³ *Id.*

¹³⁴ See *Order*, *supra* para. 13.

¹³⁵ *Id.*

¹³⁶ *Id.*

¹³⁷ *Id.*; see Pipeline Safety Act § 17.

¹³⁸ See *N11 First Report and Order*, 12 FCC Rcd at 5597, para 41.

access.¹³⁹ In order to minimize the impact of our action, including the impact on small business entities, we provide a two year period, from publication of this *Order* in the Federal Register, for implementing the 811 code.¹⁴⁰ Based on the record before us, we believe two years from publication of this *Order* in the Federal Register is a reasonable time period for implementation of 811.¹⁴¹ The alternative of not providing for a transition period was considered but rejected because we believe a transition period is necessary to provide all telecommunications carriers, including wireline, wireless, and payphone service providers, sufficient time to make the necessary network modifications or upgrades, as well as integrate existing One Call notification systems, thus minimizing any adverse or unfair impact on smaller entities.¹⁴² In addition, this transition period will give carriers time to clear this number of any other existing uses, provide customer education, and ensure that there is no unreasonably abrupt disruption of the existing uses.¹⁴³

F. Publication of FRFA

45. The Commission will send a copy of the *Order*, including this FRFA, to the Chief Counsel for Advocacy of the Small Business Administration. A copy of the *Order* and FRFA (or summaries thereof) will also be published in the Federal Register.¹⁴⁴

¹³⁹See *Order*, *supra* para. 33; THG Comments at 2-4.

¹⁴⁰See *Order*, *supra* paras. 32-34.

¹⁴¹See *id.* at para. 32.

¹⁴²*Id.* at paras. 32-34.

¹⁴³*Id.* at para. 34.

¹⁴⁴See 5 U.S.C. § 604(b).

**SEPARATE STATEMENT OF
CHAIRMAN MICHAEL K. POWELL**

Re: The Use of N11 Codes and Other Abbreviated Dialing Arrangements, Sixth Report and Order

Damage from excavation activities can cause crippling outages to the nation's energy supply, communications networks, law enforcement agencies, hospitals, air traffic control operations, emergency response providers, and military bases. The "One Call" system was instituted as a means by which contractors and the public can alert the proper authorities to imminent excavation work, thereby avoiding potential service interruptions and safety hazards. The Congress found One Call notifications so integral to public safety that it directed the Commission and the Department of Transportation to establish a single One Call number to enhance the system's effectiveness. Today's action carries out this Congressional mandate.

Better, more efficient communication regarding excavations means saved lives and dollars as well as a more secure homeland, and 811 makes that a reality. I call on industry stakeholders to increase public awareness of the One Call notification system and promote the use of the new nationwide 811 One Call number.